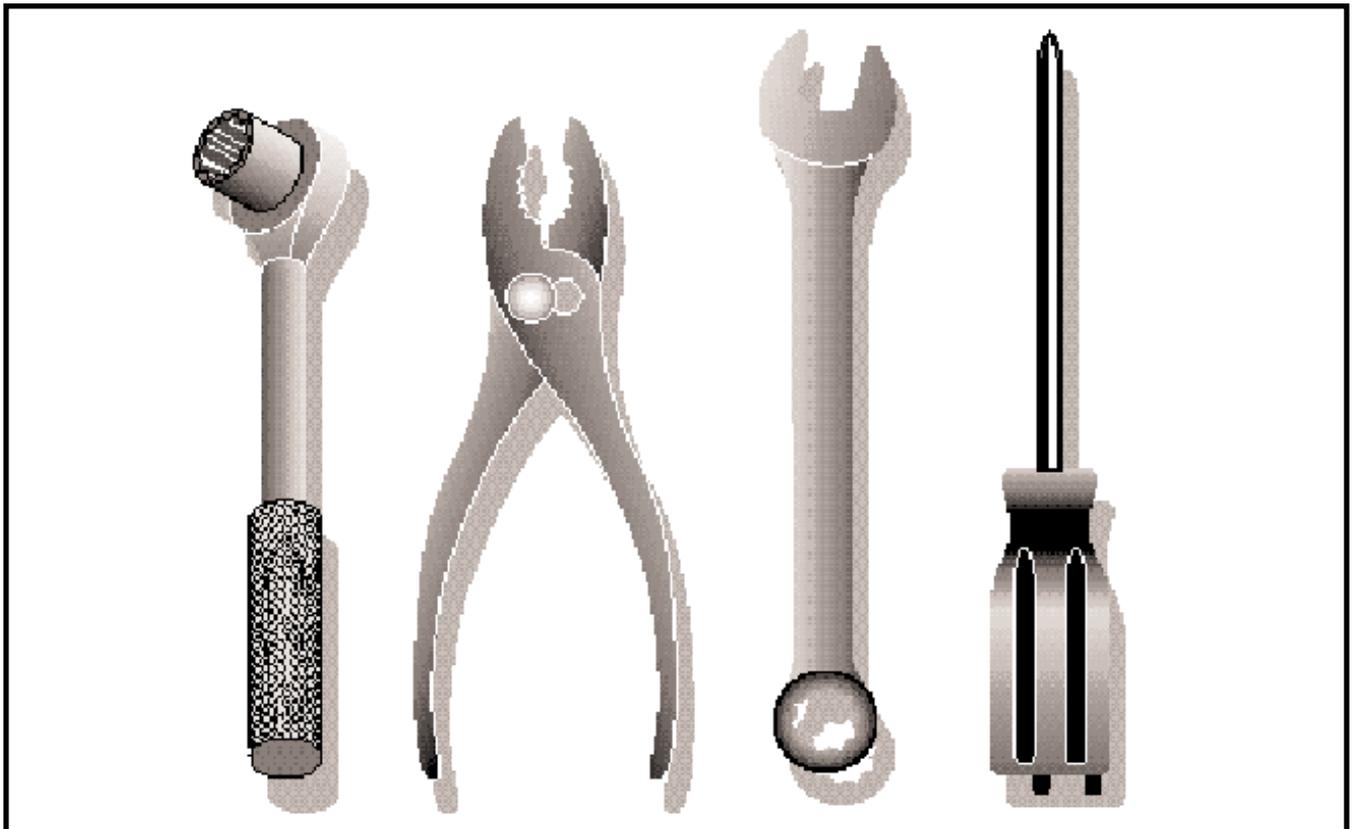


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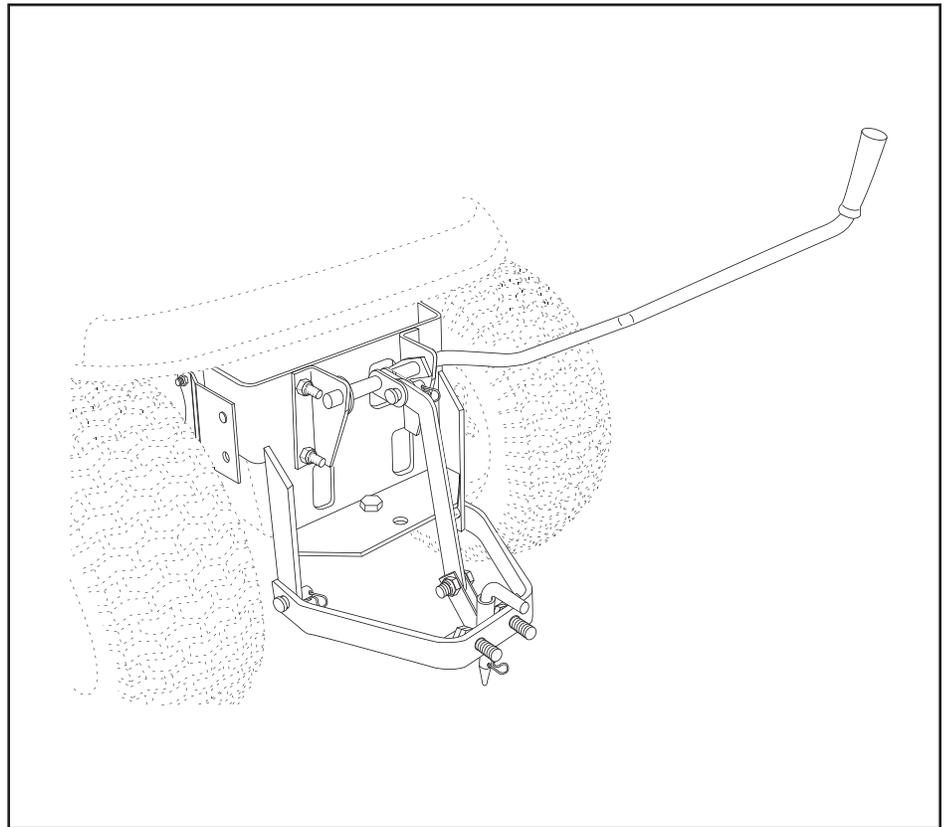
## Sleeve Hitch (23 inch tire) (45-03021)





# OWNERS MANUAL

**Model No.  
45-03021**



## SLEEVE HITCH

**CAUTION:**  
Read Rules for  
Safe Operation  
and Instructions  
Carefully

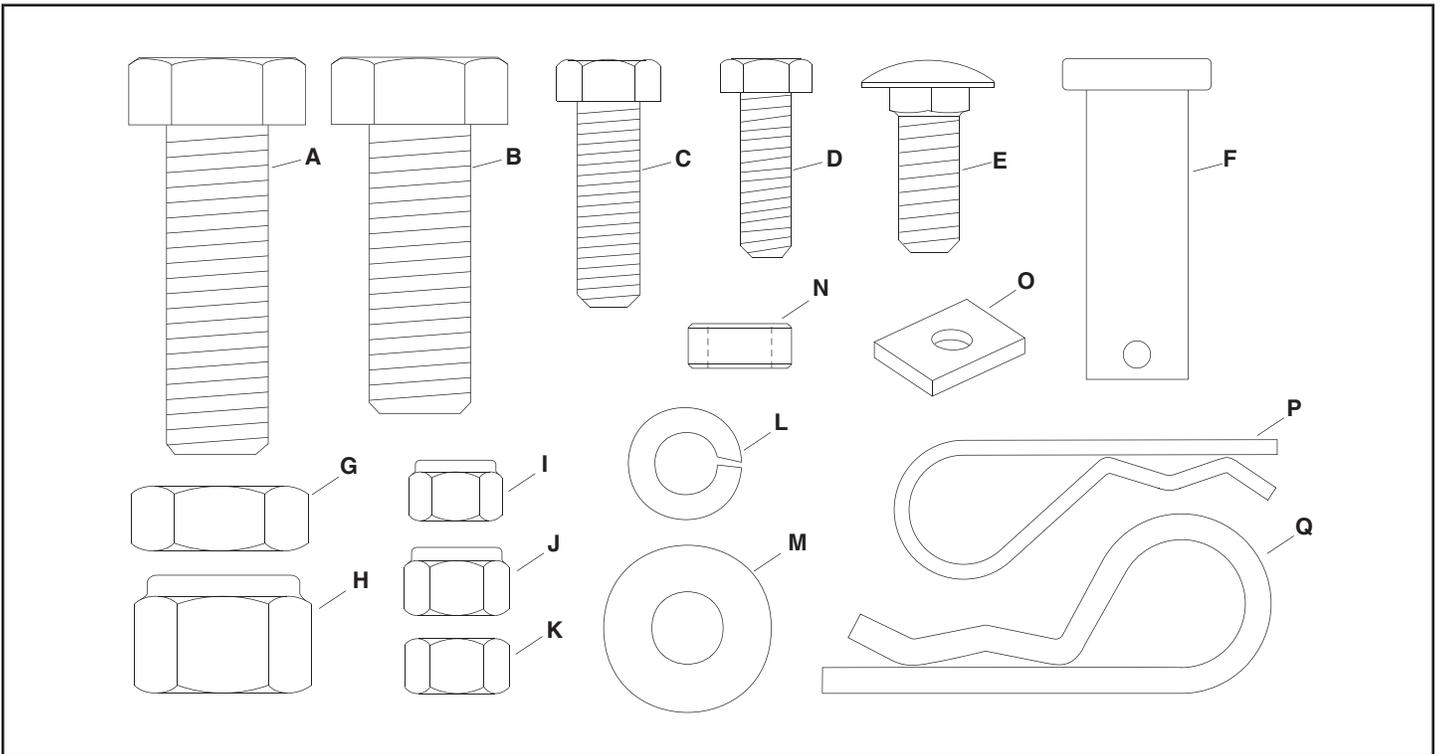
- Safety
- Assembly
- Operation
- Maintenance
- Parts

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# SAFETY RULES

1. Read this owners manual and your vehicle and implement owners manuals before using this hitch.
2. Do not allow children to operate vehicle or sleeve hitch.
3. Do not allow adults to operate the vehicle or sleeve hitch without proper instructions.
4. Do not allow anyone to ride on sleeve hitch.
5. Always place sleeve hitch in lowered position when attaching an implement.
6. Before lowering and operating the implement, be sure no one is near the area of operation.
7. Lower the sleeve hitch and implement when leaving vehicle unattended.
8. Vehicle braking and stability may be affected. Drive slowly when sleeve hitch and implement are in raised position. **Stay off of steep slopes.**
9. Keep all nuts and bolts tight and be sure the equipment is in safe operating condition.

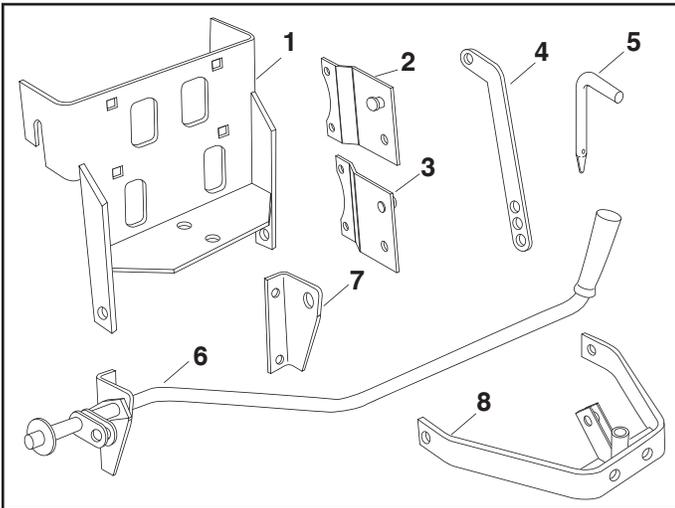
## HARDWARE PACKAGE (SHOWN FULL SIZE)



KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A	2	Hex Bolt, 5/8" x 2"	J	4	Nylock Nut, 3/8"
B	2	Hex Bolt, 5/8" x 1-3/4"	K	4	Hex Nut, 3/8"
C	4	Hex Bolt, 3/8" x 1-1/4"	L	4	Lock Washer, 3/8"
D	1	Hex Bolt, 5/16" x 1"	M	2	Flat Washer, 3/8"
E	4	Carriage Bolt, 3/8" x 1"	N	1	Spacer
F	3	Clevis Pin	O	1	Spacer Plate
G	2	Jam Nut, 5/8"	P	3	3/32" Hair Cotter Pin
H	2	Nylock Nut, 5/8"	Q	1	5/32" Hair Cotter Pin
I	1	Nylock Nut 5/16"			

**NOTE:** Bolt (C), Lock Washer (L) and Nut (K) will not be used unless the mounting holes in the tractor do not already contain bolts and nuts.

## CARTON CONTENTS



1. Sleeve Hitch Frame Assembly
2. Mounting Bracket (R.H.)
3. Mounting Bracket (L.H.)
4. Lifting Link Plate
5. Hitch Pin
6. Lift Lever Assembly (with R.H. Pivot Bracket)
7. L.H. Pivot Bracket
8. Sleeve Hitch Lift Assembly

## ASSEMBLY

### TOOLS REQUIRED FOR ASSEMBLY

- (1) 1/2" Wrench or Adjustable Wrench
- (2) 9/16" Wrenches or Adjustable Wrenches
- (1) 15/16" Wrenches or Adjustable Wrenches

1. Assemble a 5/16" x 1" hex bolt, a spacer and a 5/16" nylock nut to the three position slot in the R.H. pivot bracket on the left lever assembly. Use the position closest to the bend in the bracket (lowest implement depth setting). See figure 1.

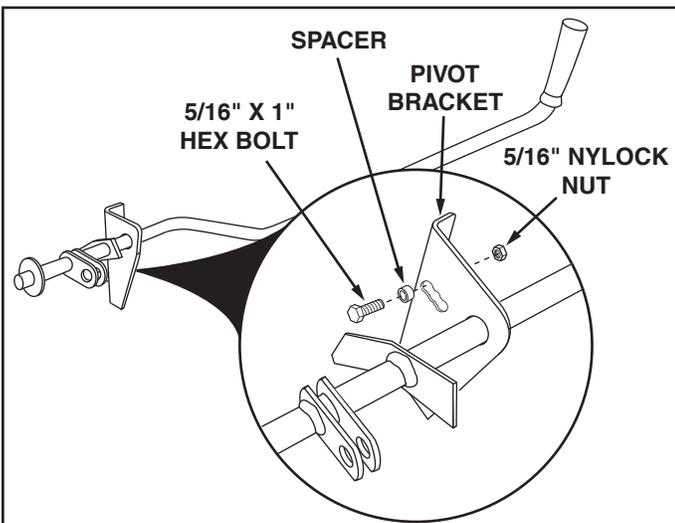


FIGURE 1

### IF YOUR TRACTOR LOOKS LIKE FIGURE 2A

2. Install two 3/8" x 1-1/4" hex bolts in the left side of the tractor as shown. Attach the left (L.H.) Mounting Bracket (pin at top facing in) to the bolts using two 3/8" lock washers and 3/8" hex nuts. Repeat on the right side. See figure 2A.

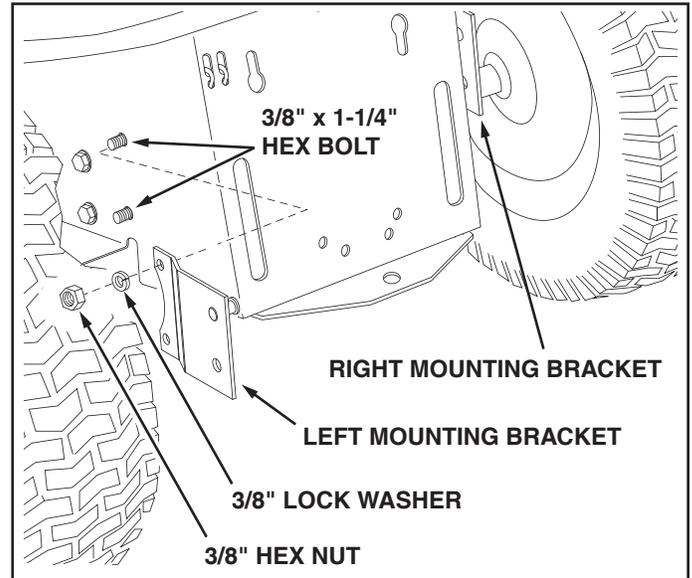


FIGURE 2A

### IF YOUR TRACTOR LOOKS LIKE FIGURE 2B

3. Remove the nuts from the two bolts in each side of the tractor, leaving the bolts in place. See figure 2B.
4. Attach the left (LH) and right (RH) Mounting Brackets to the bolts using the original nuts and two 3/8" flat washers. The brackets should angle outward with the weld pins at the top of the brackets facing inward. See figure 2B.

**NOTE:** If no bolt and nut are present in a hole, use a 3/8" x 1-1/4" hex bolt, 3/8" lock washer and 3/8" hex nut to attach the Mounting Bracket to the hole.

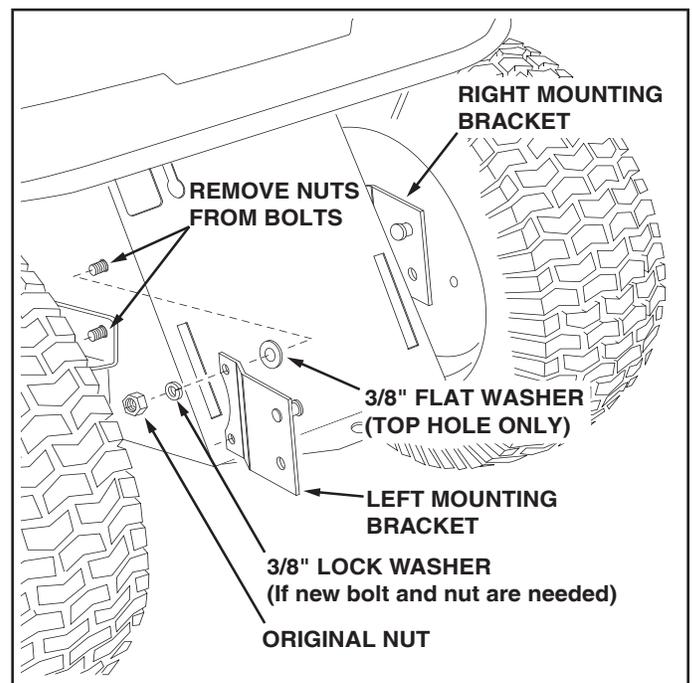


FIGURE 2B

- Place the L.H. Pivot Bracket onto the end of the Lift Lever Assembly (the R.H. Pivot Bracket comes already installed on the assembly). See figure 3.
- Attach the R.H. and L.H. Pivot Brackets to the Sleeve Hitch Frame Assembly using four  $\frac{3}{8}$ " x 1" carriage bolts and  $\frac{3}{8}$ " nylock nuts. See figure 3.

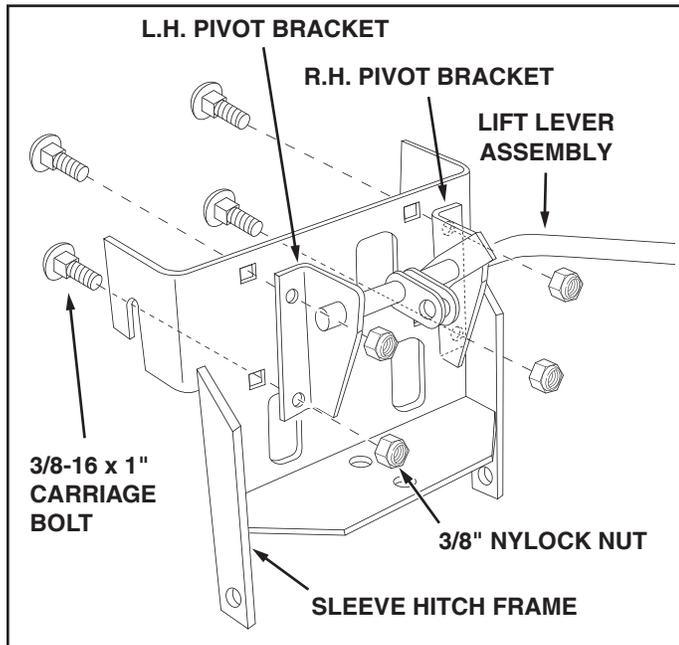


FIGURE 3

- Hook the Sleeve Hitch Frame Assembly onto the weld pins in the mounting brackets. Attach the bottom of the Assembly to the tractor hitch using a  $\frac{5}{8}$ " x 1-3/4" hex bolt and a  $\frac{5}{8}$ " nylock nut. See figure 4.

**NOTE:** If your tractor hitch has ridges that prevent the sleeve hitch assembly from resting flat, place the spacer plate underneath the sleeve hitch assembly.

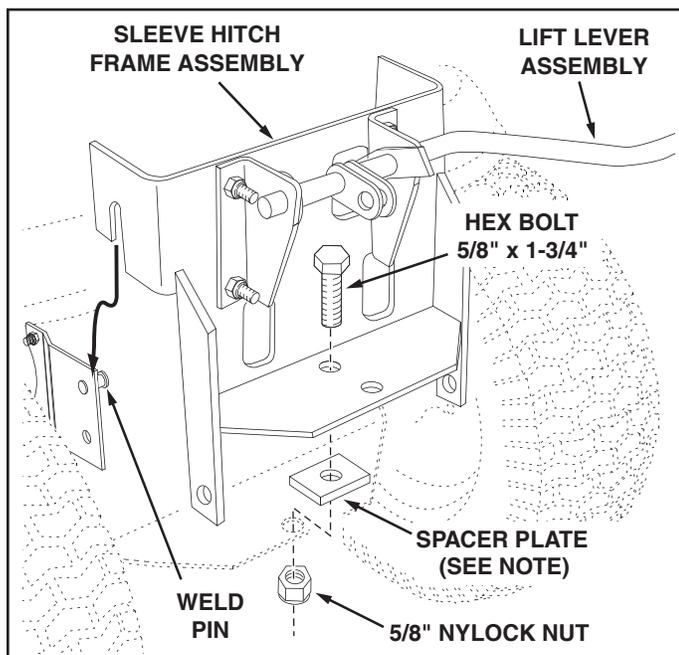


FIGURE 4

- Assemble the two  $\frac{5}{8}$ " jam nuts halfway onto the two  $\frac{5}{8}$ " x 2" hex bolts. Screw the bolts into the nuts that are welded to the Sleeve Hitch Lift Assembly. Tighten the jam nuts against the welded nuts. See figure 5.
- Assemble the lifting link to the Sleeve Hitch Lift Assembly using a  $\frac{5}{8}$ " x 1-3/4" hex bolt and a  $\frac{5}{8}$ " nylock nut. Use the bottom hole in the lifting link (gives the lowest implement depth setting). Tighten the nut only until snug. Do not squeeze the welded arms together. See figure 5.

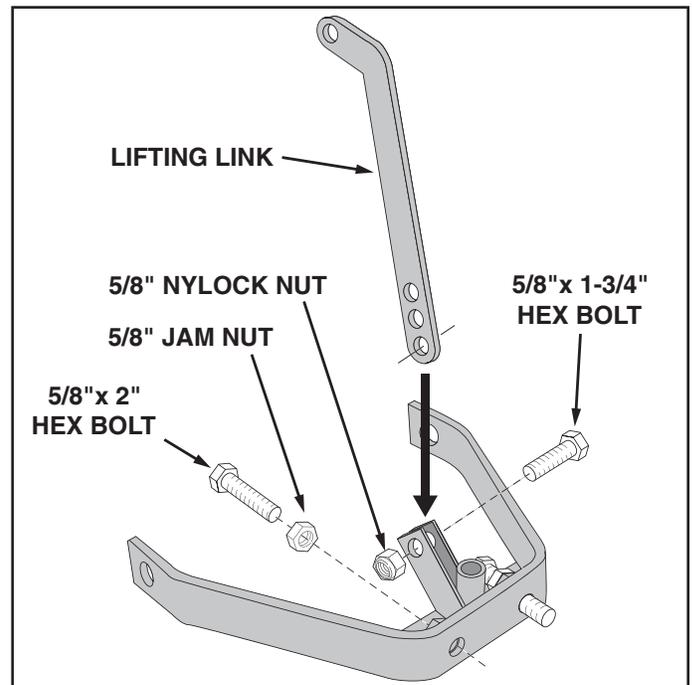


FIGURE 5

- Attach the Sleeve Hitch Lift Assembly to the Sleeve Hitch Frame Assembly using three  $\frac{5}{8}$ " x 1-3/4" clevis pins and  $\frac{3}{32}$ " hair cotter pins as shown in figure 6.
- Install the hitch pin in the sleeve hitch and secure it with the  $\frac{5}{32}$ " hair cotter pin. See figure 6.

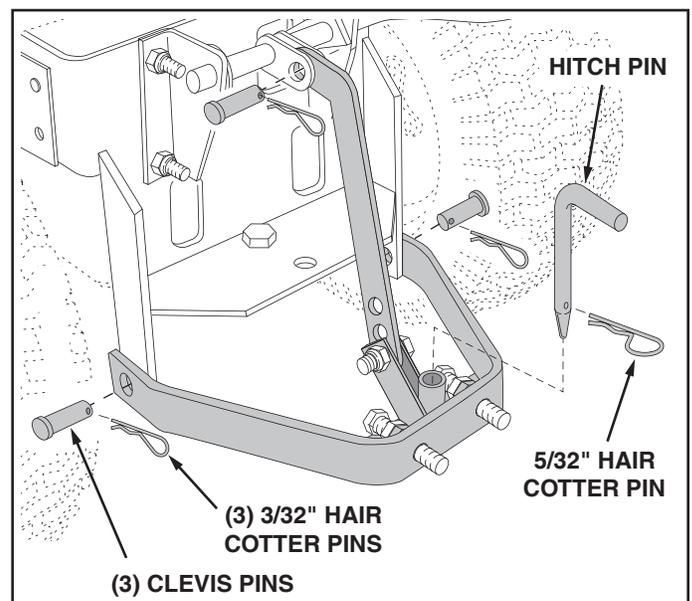


FIGURE 6

## OPERATION

1. Move the lift lever backward to lower the sleeve hitch.
2. Attach an implement using the sleeve hitch pin. Tighten the 5/8" x 2" stabilizer bolts against the implement hitch and then tighten the jam nuts. See figure 5 on page 4.

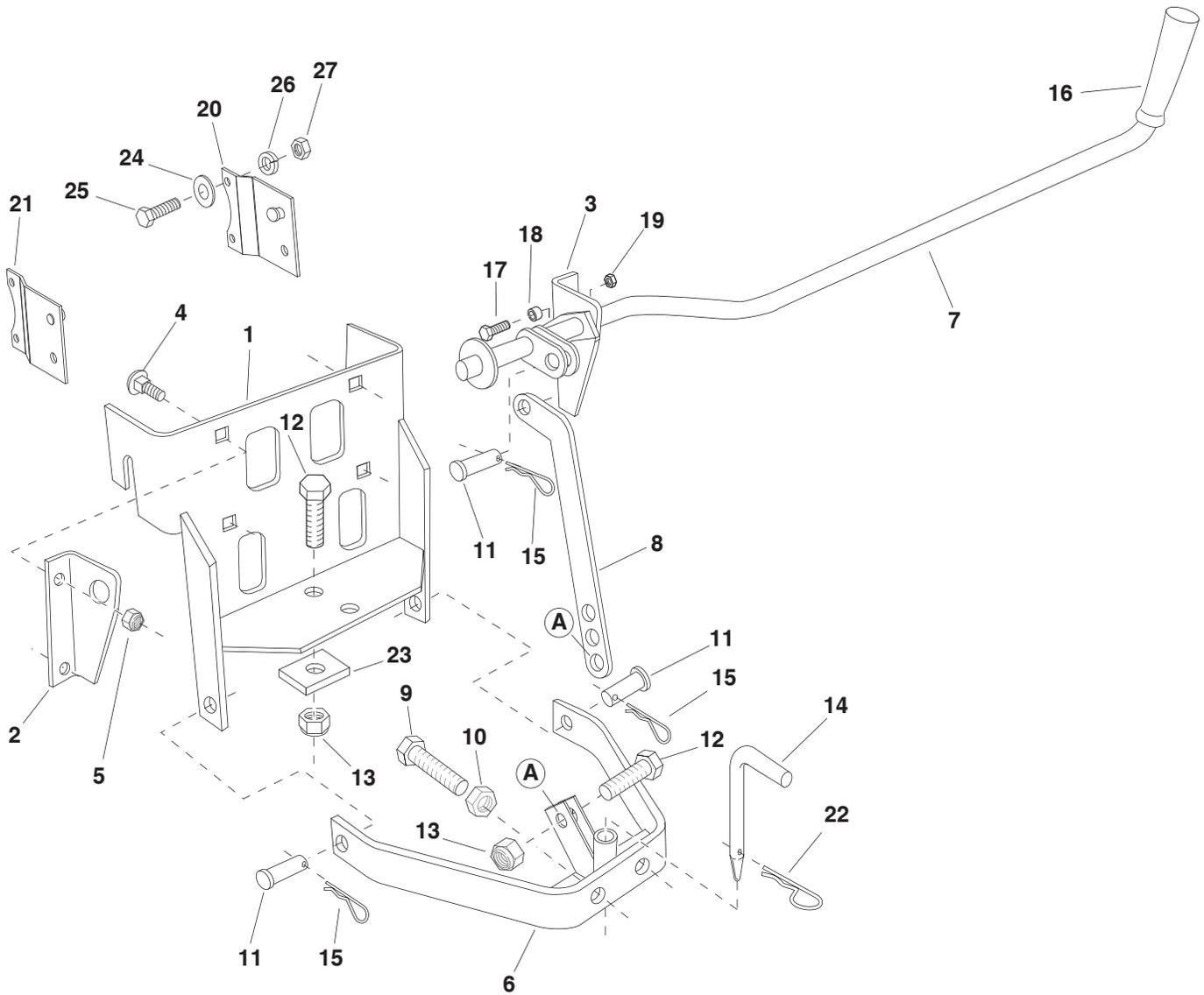
**IMPORTANT:** Some implements may require that the stabilizer bolts not be tightened. Refer to your implement owner's manual.

3. The sleeve hitch is assembled in the lowest position by the assembly instructions. If the implement attached to the sleeve hitch is not level front to back during operation:
  - a. Move the hex bolt in the lifting link to a hole (3 holes available) that gives better levelling.
  - b. For closer adjustment, move the hex bolt assembled in figure 1 to a position in the three position slot that gives better levelling.
4. To tow an implement that has a tow hitch, simply remove three clevis pins and then remove the Sleeve Hitch Lift Assembly from the Sleeve Hitch Frame Assembly.
5. To remove the entire Sleeve Hitch attachment, remove the 5/8" x 1-3/4" hex bolt and 5/8" nylock nut which fasten the bottom of the sleeve hitch to the tractor hitch, then lift the attachment off the tractor.

## MAINTENANCE

1. Clean off after each use.
2. Oil pivot points as needed.
3. Store in a dry location.

# REPAIR PARTS FOR MODEL 45-03021 SLEEVE HITCH



Ref	Part No.	Qty	Description	Ref	Part No.	Qty	Description
1	65409	1	Sleeve Hitch Frame	15	43343	3	Pin, Hair Cotter 3/32"
2	25715	1	Pivot Bracket, Left	16	46471	1	Grip, Plastic
3	25714	1	Pivot Bracket, Right	17	43063	1	Bolt, 5/16-18 x 1"
4	43350	4	Bolt, Carriage 3/8-16 x 1"	18	23625	1	Spacer
5	HA21362	4	Hex Lock Nut, 3/8-16	19	47810	1	Nylock Nut, 5/16"
6	65404	1	Sleeve Hitch Lift Assembly	20	65370	1	Mounting Bracket, Right
7	64625	1	Lift Lever Assembly	21	65369	1	Mounting Bracket, Left
8	24732	1	Lifting Link Plate	22	714-0117	1	Pin, Hair Cotter, 5/32"
9	47947	2	Bolt, Hex 5/8-11 x 2"	23	25685	1	Spacer Plate
10	712-0242	2	Hex Jam Nut, 5/8-11	24	43070	2	Flat Washer
11	HA3980	3	Clevis Pin, 5/8" x 1-3/4"	25	43087	4	Bolt, Hex 3/8-16 x 1-1/4"
12	47951	2	Bolt, Hex 5/8-11 x 1-3/4"	26	43003	4	Lock Washer, 3/8"
13	712-0261	2	Nylock Nut, 5/8-11	27	43015	4	Hex Nut, 3/8-16
14	47950	1	Pin, Sleeve Hitch		49949	1	Owner's Manual

# NOTES

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